# PULMONARY SARCOIDOSIS

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Further to the articles published by Khoo et al (1964) and Bovornkitti et al (1964), we feel it would be of interest to report three cases of proven intrathoracic sarcoidosis found at this centre since 1962, which we have been able to follow up for some time.

# CASE A

A male Malay patient, aged 30 years, born and working as a translator in Brunei, was referred to us in September 1962, as a routine chest X-ray revealed bilateral hilar enlargement (See Fig. 1). At this time he had no symptoms whatsoever. On examination he was healthylooking and there were no abnormal physical signs in any system. The skin was normal, parotid glands were not enlarged and there was no abnormality in the eyes. The following investigations were done:- Hb. 16.0 gms. %, W.B.C. 7,400 with a normal differential. B.S.R. 5 mm. Urine was normal. Sputum negative direct smear, and negative on culture. Mantoux negative when first seen in September, 1962, and again six months later as an outpatient. Serum calcium was 9 mgms. % Total proteins 7.7 mgms. %, Albumen 3.87 %, globulin 3.8%, X-ray of hands normal. Bronchoscopy N.A.D. Blind scalene node biopsy showed typical sarcoid lesions (See Fig. 2).

He was started on streptomycin, P.A.S. and I.N.A.H. daily and continued this treatment as an out-patient on his return to Brunei. The streptomycin was discontinued after 60 G. had been given, but P.A.S. and I.N.A.H. was continued daily. No steroids were given. Last X-ray in October 1965 (See Fig. 3) showed almost complete resolution of the hilar shadows.



Fig. 1. X-ray Chest. Note bilateral enlarged hilar glands.



Fig. 2. Scalene node. Note typical "tuberculoidlike" lesions with no caseation.



Fig. 3. X-ray Chest. Note almost complete resolution of hilar glands.

# CASE B

A male Indian of 50 years of age was first referred to us in October, 1963. He was an assistant in a food shop. He gave a history of fever and cough for the previous 2 months, with increasing dyspnoea. On examination he was slightly dyspnoaeic at rest and pyrexial. There were scattered rales in both lungs. In the abdomen the liver was palpable and slightly tender. The spleen was not palpable. The skin, eyes and the parotid glands were normal. The chest X-ray (See Fig. 4) showed fine nodular infiltrations confluent in areas throughout all zones in both lungs. There was no mediastinal gland enlargement. The following investigations were carried out:-

W.B.C. 7,300 with a normal differential. Hb. 14 gms. % and E.S.R. 47 mm. Ist hour. Urine was normal. Sputum negative on direct smear and culture for A.F.B. Mantoux test was negative. X-ray of both hands was normal. A blind scalene node biopsy showed no significant pathological change. On 26th November 1963 a right thoracotomy and lung biopsy was performed and this showed histologically miliary-



Fig. 4. X-ray Chest. Note bilateral infiltrations with no mediastinal glandular enlargement.

like lesions with giant cell systems but no caseation. This was consistent with sarcoidosis. Unfortunately the slide has been mislaid. He was treated with streptomycin, P.A.S. and I.N.A.H. and steroids until he was discharged in February 1964. He then continued with P.A.S. and I.N.A.H. without any steroids. X-ray taken prior to discharge showed almost complete clearing of the shadowing throughout both lung fields (See Fig. 5). He remained well and was seen again in April 1965 as an out-patient. It appeared that he had been on P.A.S. and I.N.A.H. since his discharge. He was well and had no symptoms. His X-ray revealed the return of infiltration in both lung fields. He would not come into Hospital and we regret that we have not seen him since.

# CASE C

A male Indian, aged 37 years, an office peon, was admitted to this Hospital on 4th November 1963. He gave a history of a slight dry cough for 2 months. He had been referred to us because of an abnormal routine staff chest X-ray. On examination he had inspiratory and expiratory

Fig. 5. X-ray Chest. Note almost complete clearing of infiltrations in both lung fields.



Fig. 7. Scalene node. Note typical sarcoid lesions.



Fig. 6. X-ray Chest. Note bilateral infiltrations within enlargement of the right superior mediastinal glands.



Fig. 8. X-ray Chest. Note almost complete clearing of pulmonary infiltrations and disappearance of the right superior mediastinal glands.

rhonchi in both lungs and scattered rales. Nothing abnormal was found in any other system. The skin, eyes and parotid glands were normal. Chest X-ray showed scattered fine nodular infiltrations confluent in areas throughout all zones of both lungs, with some enlargement of the right superior mediastinal glands (See Fig. 6). The following investigations were carried out:-

W.B.C. 6,800 with normal differential. Hb 14.9 gms. % E.S.R. 31 mm. first hour. Urine normal. Sputum negative on direct smear and on culture. Mantoux negative. A right scalene node biopsy showed histology typical of sarcoidosis (See Fig. 7). He was apyrexial throughout his stay in hospital, during which time he was treated with streptomycin, P.A.S. and I.N.A.H. and steroids. He received a total of 50 G. of streptomycin prior to discharge and continued with P.A.S. and I.N.A.H. after discharge. Whilst an in-patient he also received prednisolone for 7 weeks. The X-ray taken on discharge showed almost complete resolution of the pulmonary shadowing; there was, however, still some widening of the mediastinal shadows. He was last seen in April 1965, when he was well and asymptomatic. He was taking his P.A.S. and I.N.A.H. and his X-ray showed nearly normal lung fields with no hilar enlargements (See Fig. 8).

# DISCUSSION

At the time these three cases were diagnosed, *i.e.* 1962 and 1963, no other cases of sarcoidosis had been reported from this area (Malaysia). As Scadding (1960) has stressed that several of his cases developed tuberculosis, we thought it wise to treat our cases with anti-tuberculosis drugs in addition to steroids, though we felt that the former had no effect on the course of the disease.

According to Hoyle and Smellie (1960) the prognosis of sarcoidosis is more favourable in patients with enlarged hilar glands and no parenchymal disease, whereas in those with parenchymal infiltrations (which were more Of the three described, one was a case of pure hilar lymphadenopathy, one a case of parenchymal pulmonary sarcoidosis and the third a case of parenchymal and mediastinal glandular sarcoidosis. One of the cases is a Malay (Case A) and two are Indians (Cases B and C). The two cases described by Khoo et al and Bovornkitti were both Indians. Our Malay patient came from Brunei and the two Indians from Malaya. The cases already described are from Singapore and Thailand. It is therefore apparent that sarcoidosis exists in South East Asia. We feel that more cases will be diagnosed when this fact is more widely known.

# SUMMARY

Three cases of intrathoracic sarcoidosis are described, one in a Malay from Brunei and two in Indians from Malaya.

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